

## **Mixtures & Solutions- Word Bank & Content/Inquiry Entries**

### **Word Bank**

<b>Mixture</b>	- two or more materials stirred together
<b>Property</b>	- a characteristic of an object, something you can observe such as size, color, shape or texture
<b>Solution</b>	- a special mixture formed when a material dissolves in water
<b>Dissolving</b>	- a process in which one material disperses uniformly into another material, so that the first material seems to disappear
<b>Evaporation</b>	- causes liquids to dry up- the liquid turns to gas and disperses into the air, leaving any dissolved material behind
<b>Crystal</b>	- the solid form of a material that can be identified by its properties, such as shape, color, and pattern
<b>Solvent</b>	- the liquid in a solution into which the solid material goes
<b>Solute</b>	- the material in a solution that dissolves
<b>Universal solvent</b>	- water is known as the universal solvent because so many things dissolve in it
<b>Saturated solution</b>	- the result when a solute dissolves in a solvent until no more will dissolve
<b>Solubility</b>	- the property that substances have of dissolving in solvents, such as the solubility of salt in water
<b>Concentration</b>	- the amount of material dissolved in a measure of liquid
<b>To dilute</b>	- to make a solution less concentrated, usually by adding more liquid
<b>Volume</b>	- the three dimensional space occupied by something (in this investigation it is the amount of liquid).

**Chemical Reaction-** when two or more materials (chemicals) are mixed together and a change occurs.

**Precipitate** - a solid material that forms as a product of a reaction

**Change** - the process of becoming something different

### **Content/Inquiry**

Water and solid material make a mixture

Some mixtures can be separated with filters

When a solution evaporates, it leaves the dissolved material behind

If the evaporation material forms a crystal, it can be identified by its properties, such as shape and pattern

Salt will dissolve in water until it reaches saturation. No more salt will dissolve once saturation is reached

The amount of salt in a saturated solution can be determined by weighing the saturated solution and subtracting the weight of the water

Citric acid is about 4 more times soluble in water than salt is

Some materials form crystals with characteristics that can be used for identification

As the amount of solute in a solution is increased, the concentration goes up

When equal amounts of two solutions are compared on a balance, the heavier one is more concentrated

Sometimes when two or more chemicals are mixed, changes take place and new materials form

Changes, such as heat, gas formation, and precipitate formation, are evidence of a chemical reaction.